Course Title: Beginner's Guide to HTML5, CSS, and JavaScript Game Programming

Course Overview
This course is designed for beginners who want to learn how to create simple games using HTML5, CSS, and JavaScript. By the end of this course, you will have a solid understanding of the fundamentals of web development and game programming, and you will have created your own simple game.

Course Structure
The course is divided into four modules:

1. **Module 1: Introduction to HTML5 and CSS**
2. **Module 2: Introduction to JavaScript**
3. **Module 3: Game Development Basics**
4. **Module 4: Building Your First Game**

Module 1: Introduction to HTML5 and CSS

Lesson 1.1: Understanding HTML5
- **What is HTML5?**
- **Basic Structure of an HTML Document**
- **HTML Elements and Tags**

Code Example: Basic HTML Structure
```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>My First Game</title>
</head>
<body>
    <h1>Welcome to My Game</h1>
</body>
</html>
```

Lesson 1.2: Introduction to CSS
- **What is CSS?**

- **Styling HTML Elements**
- **CSS Selectors and Properties**

Code Example: Basic CSS Styling
```css
body {
    background-color: #f0f0f0;
    font-family: Arial, sans-serif;
}

h1 {
    color: #333;
    text-align: center;
}
```

Lesson 1.3: Combining HTML and CSS
- **Linking CSS to HTML**
- **Creating a Simple Layout**

Code Example: Linking CSS
```html
<head>
    <link rel="stylesheet" href="styles.css">
</head>
```

Module 2: Introduction to JavaScript

Lesson 2.1: What is JavaScript?
- **Understanding JavaScript**
- **Adding JavaScript to HTML**

Code Example: Adding JavaScript
```html
<script>
    console.log("Hello, World!");
</script>
```

Lesson 2.2: JavaScript Basics
- **Variables and Data Types**
- **Operators and Expressions**
- **Control Structures (if, loops)**

Code Example: Basic JavaScript
```javascript
let score = 0;

for (let i = 0; i < 5; i++) {
    score += 10;
}
console.log("Your score is: " + score);
```

Lesson 2.3: Functions and Events
- **Defining Functions**
- **Event Handling**

Code Example: Function and Event
```html
<button id="clickMe">Click Me!</button>
<script>
    document.getElementById("clickMe").onclick = function() {
        alert("Button Clicked!");
    };
</script>
```

Module 3: Game Development Basics

Lesson 3.1: Understanding Game Loops
- **What is a Game Loop?**
- **Creating a Simple Game Loop**

Code Example: Basic Game Loop
```javascript
function gameLoop() {
    // Update game state
    // Render game
```

```
    requestAnimationFrame(gameLoop);
}
gameLoop();
```

Lesson 3.2: Drawing on Canvas
- **Introduction to HTML5 Canvas**
- **Drawing Shapes and Images**

Code Example: Drawing on Canvas
```html
<canvas id="gameCanvas" width="400" height="400"></canvas>
<script>
    const canvas = document.getElementById("gameCanvas");
    const ctx = canvas.getContext("2d");
    ctx.fillStyle = "blue";
    ctx.fillRect(50, 50, 100, 100);
</script>
```

Lesson 3.3: Handling User Input
- **Keyboard and Mouse Events**
- **Moving Objects on Canvas**

Code Example: Moving a Rectangle
```javascript
let x = 50;
let y = 50;

document.addEventListener("keydown", function(event) {
    if (event.key === "ArrowRight") x += 5;
    if (event.key === "ArrowLeft") x -= 5;
    if (event.key === "ArrowUp") y -= 5;
    if (event.key === "ArrowDown") y += 5;
});

function draw() {
    ctx.clearRect(0, 0, canvas.width, canvas.height);
    ctx.fillRect(x, y, 50, 50);
    requestAnimationFrame(draw);
}
draw();
```

```
```

Module 4: Building Your First Game

Lesson 4.1: Game Concept and Design
- **Choosing a Game Idea**
- **Creating a Game Design Document**

Lesson 4.2: Implementing Game Mechanics
- **Adding Score and Levels**
- **Creating Game Objects**

Code Example: Simple Score System
```javascript
let score = 0;

function increaseScore() {
    score += 1;
    console.log("Score: " + score);
}
```

Lesson 4.3: Finalizing Your Game
- **Adding Sounds and Graphics**
- **Testing and Debugging**

Lesson 4.4: Publishing Your Game
- **Hosting Your Game Online**
- **Sharing with Friends**

Code Example: Simple Game Structure
```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>My First Game</title>
    <link rel="stylesheet" href="styles.css">
</head>
```

```
<body>
    <canvas id="gameCanvas" width="400" height="400"></canvas>
    <script src="game.js"></script>
</body>
</html>
```

Conclusion
By completing this course, you will have gained foundational knowledge in HTML5, CSS, and JavaScript, and you will have created your own simple game. You can continue to build on these skills to create more complex games and explore advanced topics in game development. Happy coding!